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**From:** Murray, Regan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4B06D968152A4CEFB83C9864FF5C89C6-MURRAY, REGAN]  
**Sent:** 9/17/2018 6:05:19 PM  
**To:** Burkhardt, Jonathan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2b0b6b8df43946f39cf56383ba809cbb-Burkhardt,]  
**Subject:** RE: Student Interested in Premise Plumbing Modeling?

Hi Jon,

I don't think I can do any of those dates. Feel free to go ahead and meet with them if you want. Maybe invite Hyoungmin and James too if you want. Or we could try to schedule further out in October. Perhaps this student might be interested in working with us via Pegasus? Thanks!

Regan

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**From:** Burkhardt, Jonathan  
**Sent:** Monday, September 17, 2018 1:57 PM  
**To:** Murray, Regan <Murray.Regan@epa.gov>  
**Subject:** FW: Student Interested in Premise Plumbing Modeling?

Regan,

I can probably do any of these days. 9/28 is a Friday. Do you have a preference on days if I reply to him?

Thanks,  
Jon

Jonathan Burkhardt  
National Risk Management Research Laboratory  
26 Martin Luther King Drive West  
Cincinnati, OH 45268  
513-569-7466

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**From:** Buchberger, Steven (buchbesg) [<mailto:buchbesg@ucmail.uc.edu>]  
**Sent:** Wednesday, September 05, 2018 5:33 PM  
**To:** Burkhardt, Jonathan <[Burkhardt.Jonathan@epa.gov](mailto:Burkhardt.Jonathan@epa.gov)>  
**Cc:** Murray, Regan <[Murray.Regan@epa.gov](mailto:Murray.Regan@epa.gov)>  
**Subject:** RE: Student Interested in Premise Plumbing Modeling?

Hi Jon,

Toju confirmed with me that she is interested to learn more about any premise plumbing opportunities at EPA. Lunch later in September sounds great....good days for me are:

9/19  
9/25  
9/28

Thanks,  
Steve

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**From:** Burkhardt, Jonathan <[Burkhardt.Jonathan@epa.gov](mailto:Burkhardt.Jonathan@epa.gov)>  
**Sent:** Wednesday, September 05, 2018 8:21 AM  
**To:** Buchberger, Steven (buchbesg) <[buchbesg@ucmail.uc.edu](mailto:buchbesg@ucmail.uc.edu)>  
**Cc:** Murray, Regan <[Murray.Regan@epa.gov](mailto:Murray.Regan@epa.gov)>  
**Subject:** RE: Student Interested in Premise Plumbing Modeling?

Steve,

Thanks for the information. I think we are going to post another ORISE position, but I can provide you with more information once that has become official.

Yes, I agree a lunch on Short Vine is probably in order. I am out of the office until 9/17, but then should have a lot more flexibility.

Thanks,  
Jon

Jonathan Burkhardt  
National Risk Management Research Laboratory  
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513-569-7466

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**From:** Buchberger, Steven (buchbesg) [<mailto:buchbesg@ucmail.uc.edu>]  
**Sent:** Tuesday, September 04, 2018 4:56 PM  
**To:** Burkhardt, Jonathan <[Burkhardt.Jonathan@epa.gov](mailto:Burkhardt.Jonathan@epa.gov)>  
**Cc:** Murray, Regan <[Murray.Regan@epa.gov](mailto:Murray.Regan@epa.gov)>; Buchberger, Steven (buchbesg) <[buchbesg@ucmail.uc.edu](mailto:buchbesg@ucmail.uc.edu)>  
**Subject:** RE: Student Interested in Premise Plumbing Modeling?

Hi John,

Thanks for your phone message and follow-up email. I have a PhD student (Ms. Toju Omaghomi) who is nearly finished. She hopes to defend her dissertation this semester, though there is some chance it may spill into spring 2019. Toju's work on premise plumbing deals with:

1. Estimating peak instantaneous water demands (to better size premise plumbing systems)
2. Simulating energy consumption due to hot water use ( driving EPANET with random demands at individual fixtures)

She is out of communication for a few days, so I've not had a chance to get her thoughts on any of this.

Sometime in the near future, I hope you and I can touch base to discuss emerging issues in premise plumbing and prospects for potential collaboration. Maybe lunch on Short Vine?

Regards,  
Steve

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Steven Buchberger, PhD, PE  
Professor  
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Cincinnati, Ohio 45221-0071  
513 556 3681

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**From:** Burkhardt, Jonathan <[Burkhardt.Jonathan@epa.gov](mailto:Burkhardt.Jonathan@epa.gov)>  
**Sent:** Tuesday, September 04, 2018 10:09 AM  
**To:** Buchberger, Steven (buchbesg) <[buchbesg@ucmail.uc.edu](mailto:buchbesg@ucmail.uc.edu)>  
**Cc:** Murray, Regan <[Murray.Regan@epa.gov](mailto:Murray.Regan@epa.gov)>  
**Subject:** Student Interested in Premise Plumbing Modeling?

Steve,

I'm emailing today to clarify the voicemail I left and ask if you have or know of any students who might be interested in premise plumbing modeling. We were able to bring Hyoungmin Woo on as an ORISE, but are considering a second student/fellow.

I believe that you may have one current PhD student, but I know that students are also beginning to look for graduate mentors soon. We are currently considering opening the additional ORISE position for the premise plumbing project, but would consider current graduate students, or post-Masters or -Doctoral fellows. For the moment, I'm just asking to see if you know of anyone that might fit this opportunity, but don't need anything else at this time.

If you have any other questions, please feel free to reach out.

Thanks,  
Jon

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